AD_____

GRANT NUMBER DAMD17-96-1-6310

TITLE: Identification of Abuse and Health Consequences for Military and Civilian Women

PRINCIPAL INVESTIGATOR: Jacquelyn C. Campbell, Ph.D.

CONTRACTING ORGANIZATION: The Johns Hopkins University
School of Nursing
Baltimore, Maryland 21205-2196

REPORT DATE: October 1997

TYPE OF REPORT: Annual

PREPARED FOR: Commander
U.S. Army Medical Research and Materiel Command
Fort Detrick, Frederick, Maryland 21702-5012

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	October 1997	Annual (15 Sep 96 - 14 Sep 97)

4. TITLE AND SUBTITLE Identification of Abuse and Health Consequences for Military and Civilian Women

5. FUNDING NUMBERS
DAMD17-96-1-6310

6. AUTHOR(S)
Jacquelyn C. Campbell, Ph.D.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
The Johns Hopkins University
School of Nursing
Baltimore, Maryland 21205-2196

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
Commander
U.S. Army Medical Research and Materiel Command
Fort Detrick, Frederick, Maryland 21702-5012

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200*

The research study has been in progress for one year. We have obtained all Internal Review Board approvals and the Certificate of Confidentiality. We are presently in the first phase of data collection of HMO enrollees. We have developed and piloted the telephone survey protocol and finalized operational definitions. QuanTech, the professional survey firm, completed the programming of the questionnaire into their computerized interview system and collaborated with us to develop the interview training manual. We conducted a three day interviewer training session. Screening and in-depth interviews of the first 769 study participants began on September 12.

14. SUBJECT TERMS	15. NUMBER OF PAGES
Defense Women's Health Research Program	12
	16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	Unlimited

FOREWORD

Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the U.S. Army.

____ Where copyrighted material is quoted, permission has been obtained to use such material.

____ Where material from documents designated for limited distribution is quoted, permission has been obtained to use the material.

____ Citations of commercial organizations and trade names in this report do not constitute an official Department of Army endorsement or approval of the products or services of these organizations.

____ In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals," prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Resources, National Research Council (NIH Publication No. 86-23, Revised 1985).

JC For the protection of human subjects, the investigator(s) adhered to policies of applicable Federal Law 45 CFR 46.

____ In conducting research utilizing recombinant DNA technology, the investigator(s) adhered to current guidelines promulgated by the National Institutes of Health.

____ In the conduct of research utilizing recombinant DNA, the investigator(s) adhered to the NIH Guidelines for Research Involving Recombinant DNA Molecules.

____ In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories.

Jacqueline C. Campbell 10/8/97

PI - Signature Date

TABLE OF CONTENTS

Introduction:

The purpose of this study is to research the prevalence of physical, emotional, and sexual intimate partner abuse (battering) of military and civilian women. Battering (intimate partner abuse) is defined as repeated physical and/or sexual assault from an intimate partner within a context of coercive control. It is a risk factor for a variety of physical and mental health problems frequently treated in outpatient, primary care settings. Civilian battered women and their children have been found to use medical services 6-8 times more often than did a non-abused control sample[1,2,3,4]. It is likely that abused military women, whose medical care is provided by the military, would have similar use of medical services.

There is no evidence that the prevalence of battering by an intimate partner is any different for military women compared to those in civilian life. Military families may even be at higher risk because of stress associated with frequent transfers, separations, and isolation from extended family.[5,6] The incidence of reported intimate partner abuse among American women has been estimated at between 12-15%,[7] which for the almost 350,000 women in the military, translates to as many as 52,500 currently abused women in this population.

The purposes of this investigation are to: 1) determine and compare the lifetime and annual prevalence of intimate partner abuse of active duty military women and civilian women, 2) investigate women's perceptions of mandatory reporting of abuse and the impact on disclosure, and 3) investigate the medical sequelae and costs of treatment associated with abuse over time. The overall goal of this research is to develop a more comprehensive understanding of the physical and mental health consequences and associated medical costs of intimate partner abuse against women, using population based data from a sample of military women and a comparable sample of HMO enrollees. Such information is necessary to plan effective health care policies and interventions in military and civilian health facilities to reduce the human suffering and medical costs associated with intimate partner abuse.

Experimental Methods:

Stark and Flitcraft[8] have developed markers for a four-level scale used in medical record reviews to assess the probability that an illness or injury was caused by abuse. Many published studies have used this method to determine if health care staff missed the diagnosis of intimate partner abuse and its association with subsequent health system encounters. However, the abuse was inferred rather than verified independently. This study improves upon that methodology by using patient self-report of abuse and directly linking the patient interview to the medical record. Another limitation of prior studies of medical care related to abuse is that they have not been population based. Biased samples were created by using clinic, Emergency Department or shelter populations. our sample is drawn from the entire population of military women and HMO enrollees and thus improves the representativeness and generalizability of the findings.

Study participants are being randomly selected from two populations; 1) HMO enrollees registered at three large Kaiser Permanente medical facilities, and 2) active duty military women who receive their annual pap smear or primary care as part of Tri-Sciences Health Care at National Naval Medical Center. The sampling frame includes all women between the ages of 18 - 52 years old who have been in the military (or enrolled with Kaiser) for at least three years. Johns Hopkins is sending letters of introduction to 10,000 Kaiser members and 7500 military women. We anticipate a final sample of 2,000 women from each population. Based on previous research [1, 7,9,10], we estimated that 10% of the population will report abuse resulting in a sample size of 200 cases from the military sample and 200 cases from the HMO sample. For comparison purposes, we will randomly sample 200 military women and 200 HMO women who have never experienced physical abuse.

The two main components of data collection for this study are; 1) telephone survey, and 2) medical records review. The telephone survey will be used to estimate prevalence of abuse in the population samples, to identify cases and controls, and to collect detailed information from the cases and controls on their medical and mental health symptoms (Appendix 1, Statement of Work, Technical Objective # 1). Medical records of all cases and controls will be reviewed to document medical conditions, utilization of health care services, and health care costs incurred from 1995 through 1997 (Technical Objective #2-#5). Cases constitute women who answer "yes" to having been physically or sexually abused by a partner within five years prior to 1995. Control designated women answer "no" to all abuse questions and report having never experienced emotional, physical, or sexual abuse.

Progress to date:

The research project has been in progress for one year. The investigation team attended a training session on the military violence protocol and procedures held by Nancy Petit, MD, LCDR of the National Naval Medical Center on November 6, 1996. Meeting regularly every other week, the team is proceeding with the timetable of tasks as outlined in the Statement of Work (Appendix 1). The Project Director was hired on December 1 and is now fully trained and in charge of day to day operations. Internal Review Board applications were granted by the Departments of the Army and Navy, Kaiser Permanente (local and national), and Johns Hopkins University. Certificate of Confidentiality was obtained from the Department of Health and Human Services. The Bureau of Navy personnel approved our request to conduct the survey.

We are presently in the first phase of data collection of HMO enrollees (Statement of Work, Technical Objective #1, Tasks #2 - #6). We have developed and piloted the telephone survey protocol and finalized operational definitions. QuanTech, the professional survey firm, completed the programming of the questionnaire into their computerized interview system and collaborated with us to develop the interview training manual. We conducted a three day interviewer training session. Screening and in-depth interviews of the first 769 study participants began on September 12. As of **September 29**, there were **91** completed interviews (**11.8%**), **3** non-working numbers (**<1%**), and **5** refusals (**<1%**). QuanTech is attempting to contact the remaining **360** participants. Interviews will continue to be conducted on a daily basis, Monday through Saturday.

Initially, recruitment consisted of an invitational mailing to 6000 eligible Kaiser members anticipating an ideal 40% response rate. Our final response rate after a follow-up mailing of reminder postcards was 12.8 percent, yielding 769 participants. To meet our goal of 2000 interviews, we mailed invitational letters to the remaining 4000 women in our original sampling pool on September 12. Based on a 13 percent response rate, we expect to recruit a minimum of 520 study participants from this second mailing. Because our expected recruitment still falls below our required level, we decided to pursue a second sample of women from a third Kaiser Permanante facility in Springfield, Virginia. Initial contact with the Springfield facility was very positive and prompt. We now have received an official letter of approval and are beginning the recruitment process. At the most, the additional recruitment has lengthened the duration of the interview process by a few months, thereby delaying the timeline for data analysis and medical records review by the same amount of time.

We have recently initiated the recruitment process for military women (Technical Objective #1, Task #8). Commander Margaret Ann Holder, Nurse Researcher at the National Naval Medical Center, will be assisting us in this effort.

References:

1. Gelles RJ, Straus MA, The medical and psychological costs of family violence. In M Straus, RJ Gelles (eds) Physical violence in American families: risk factors and adaptations to violence in 8.145 families. New Brunswick: Transaction Publishers; 1990.
2. Gleason WJ. Mental disorders in battered women: an empirical study. Violence and Victims 1993; 8:53-68
3. Bergman B, Brismar B, Nordin C. Utilization of medical care by abused women. British Med J 1992; 305:27-28
4. Rath GD, Jaratt LG, Leonardson G. Rates of domestic violence against adult women by men partners. J Amer Bd Fam Prac 1989; 227:227-233
5. Neidig PH, Friedman DH, Collins BS. Attitudinal characteristics of males who engaged in spouse abuse. J Fam Viol 1986;1:223-233
6. Magruder C, Croutharmel, MS, Mays R, Sheliga V, Norwood A, Vawter A. Characteristics of spouse abuse in the U.S. Army. Unpublished; 115.
7. Straus MA, Gelles RJ (eds). Physical violence in American families: risk factors and adaptations to violence in 8,145 families. New Brunswick: Transaction Publishers; 1990.
8. Stark E, Flitcraft A, Franzier W. Medicine and patriarchal violence: the social construction of a private event. Intl J Hlth Svcs 1979;9:461-491.
9. Friedman L, Samet J, Roberts M, Hodlen M, Harmes P. Inquiry about victimization experiences. Arch Int Med 1992;152:1186-1190.
10. Gin NE, Rucker L, Frayne S, Cygan R, Hubbell AF. Prevalence of domestic violence among patients in three ambulatory care internal medicine clinics. J Gen Intern Med 1991;6:317-322.

STATEMENT OF WORK

APPENDIX

Technical Objective #1. To determine and compare the life time and annual prevalence of intimate partner abuse against women, including emotional, sexual and physical abuse, in a sample of military women and HMO enrollees and the relationship of this victimization to selected demographic characteristics.

Task 1:	Oct - Dec/96	Hire & train personnel. Develop communication protocols.
Task 2:	Jan - May/97	Obtain sample HMO enrollee women.
Task 3:	Mar - July/97	Finalize sample and accrue additions as needed.
Task 4:	Mar - July/97	Design sampling, manual, and train interviewers
Task 5:	Aug - Sept/97	Conduct screening and in depth interviews.
Task 6:	Oct/97	Deliver annual report Year 1
Task 7:	Oct - Nov/97	Analyze HMO data for prevalence and by demographic characteristics.
Task 8:	Oct/97-Jan/98	Obtain sample military women.
Task 9:	Dec/97-Mar/98	Submit manuscript- Journal of Family Violence.
Task 10:	Feb - Apr/98	Finalize sample and accrue additions as needed.
Task 11:	Feb - Apr/98	Design sampling, manual and train interviewers
Task 12:	May - July/98	Conduct screening and in-depth interviews
Task 13:	Aug - Sept/98	Analyze Military data for prevalence and by demographic characteristics.
Task 14:	Oct/98	Deliver annual report Year 2
Task 15:	Oct/98-Jan/99	Submit manuscript to - Military Medicine Publish article Military Hospital News Paper
Task 16:	July/99	Present paper at NNFAWI Annual Meeting
Task 17:	Oct/99	Deliver Year 3 Annual Report
Task 18:	3/2000	Destroy Codebook

Technical Objective #2. To determine and compare the medical care utilization patterns and costs of care for adult military and civilian women who are abused (cases) relative to the same in non-abused women (controls) over a three year period.

Task 1:	Oct - Dec/96	Hire & train personnel. Develop communication protocol.
Task 2:	Nov/97-Mar/98	Design system, manuals, train and retrieve HMO medical utilization data.
Task 3:	Apr - May/98	Analyze HMO medical utilization data.
Task 4:	Jan - Apr/98	Identify HMO costing standards.
Task 5:	Oct/98	Year 2 Annual Report.
Task 6:	Jan - Mar/99	Design system, manuals, train and retrieve military medical utilization data.
Task 7:	Apr - July/99	Analyze military and comparative data.
Task 8:	July -Sept/99	Submit manuscript to Medical Care
Task 9:	June -Sept/99	Identify military costing standards.
Task 10:	Oct/99	Deliver Year 3 Annual Report.
Task 11:	Oct - Nov/99	Compute costs for HMO and Military
Task 12:	Dec/99-Mar/00	Submit manuscript to Nursing Economic$
Task 13:	3/2000	Final Report & Destroy Codebook

Technical Objective #3. To determine to what extent a history of intimate partner abuse is a risk factor for other medical conditions and symptoms, including:[list of related conditions]

Task 1:	Oct - Dec/96	Hire & train personnel. Develop communication protocol.
Task 2:	Apr - May/98	Analyze HMO medical utilization data.
Task 3:	Apr - July/99	Analyze military and comparative medical utilization data.
Task 4:	Aug - Oct/99	Submit manuscript to Violence Against Women
Task 5:	3/2000	Deliver Final Report & Destroy Codebook

Technical Objective #4. To compare military and civilian women's reported medical conditions with those documented in the medical chart and examine the extent to which the correspondence between the two varies between cases and controls.

Task 1:	Oct - Dec/96	Hire & train personnel. Develop communication protocol.
Task 2:	Apr - May/98	Analyze HMO reported and documented medical conditions by cases and controls.
Task 3:	Apr - July/99	Analyze military and combined reported and documented medical conditions.
Task 4:	Aug - Oct/99	Submit manuscript to medical journal.
Task 5:	3/2000	Deliver Final Report & Destroy Codebook

Technical Objective #5. To determine the percentage of military women not disclosing abuse to health care providers because of mandatory reporting regulations in health care settings and to compare health outcomes including (trauma) for those abused military women who disclosed abuse and those who did not.

Task 1:	Oct - Dec/96	Hire & train personnel. Develop communication protocol.
Task 2:	July-Sept/98	Analyze military women's disclosure and outcomes data.
Task 3:	Oct/98	Deliver Year 2 Annual Report.
Task 4:	Nov/98-Jan/99	Submit manuscript to Military Medicine.
Task 5:	Oct/99	Deliver Year 3 Annual Report.
Task 6:	3/2000	Destroy codebook

Technical Objective #6. To assess and compare abused and not abused military and civilian women's preferences for, experiences with and concerns about health care provider policies on domestic violence screening and reporting.

Task 1:	Oct - Dec/96	Hire & train personnel. Develop communication protocols.
Task 2:	Aug - Nov/98	Analyze policy responses by group and selected demographic factors.
Task 3:	Jan/99	Present at APHA
Task 4:	Dec/98-Mar/99	Submit to health policy journal.
Task 5:	Oct/99	Deliver Year 3 Annual Report.
Task 6:	3/2000	Destroy Codebook

Technical Objective #7. To provide workshops for military and civilian primary care personnel including identification and interventions for intimate partner abuse and dissemination of study results.

Task 1:	Oct - Dec/96	Hire & train personnel. Develop communication protocols.
Task 2:	Oct/99-Apr/00	Develop and present workshops/grand rounds
Task 3:	3/2000	Deliver Final Report & Destroy Codebook

Appendix 2

Personnel supported by the grant in Year 1:

Name	Role
Jacquelyn Campbell	Principal Investigator
Andrea Gielan	Co-Principal Investigator
Jacqueline Dienemann	Co-Investigator
Joan Kub	Co-Investigator
Patricia Ocampo	Co-investigator
Alison Jones	Co-Investigator
Janet Scholenberger	Project Director
Carolyn Erwin Johnson	Research Assistant
JoEllen Stinchcomb	Administrative Assistant
Allison McKenrick	Budget Analyst

Appendix 3

Presentations and Publications

Campbell, Jacquelyn, Dienemann, Jacqueline, Kub, Joan, Torres, Sara. June 28, 1997. Issues in conducting health care system domestic violence research in military populations. (paper in a panel) 5th International Family Violence Research Conference, Family Research Laboratory, University of New Hampshire, Durham, NH.